Order Code RL32553

Union Membership Trends in the United States

August 31, 2004

Gerald Mayer
Economic Analyst
Domestic Social Policy Division

Union Membership Trends in the United States

Summary

Union membership in the United States has declined significantly in recent decades. The number of union members peaked in 1979 at an estimated 21.0 million. In 2003, an estimated 15.8 million workers were union members. As a percent of employed workers, union membership peaked in 1954 at 28.3%. In 2003, 11.5% of employed workers were union members.

Most studies find that, after controlling for individual, job, and labor market characteristics, the wages of union workers are in the range of 10% to 30% higher than the wages of nonunion workers. The wage premium is generally greater for less skilled, less-educated, and younger workers and larger for private than public sector workers. Union members generally receive better or more generous fringe benefits than similar nonunion workers. Job tenure tends to be greater and quit rates lower among unionized workers. However, the wage premium may have declined in recent years.

Data from the Bureau of Labor Statistics' (BLS) monthly Current Population Survey (CPS) show that the *level* of union membership varies among different groups. Union members are more likely to be male, white, middle-age, work in the private sector, and have a high school degree or some college. The *rate* of union membership is greater among men than women and higher among older than younger workers. In 2003, 12.3% of men were union members, compared to 10.5% of women; 14.7% of workers ages 45 to 64 were union members, compared to 5.0% of workers ages 16 to 24 and 11.3% of workers ages 25 to 44.

Although the level of union membership is greater among white than black workers, in 2003 15.6% of black workers were union members, compared to 11.0% of white workers. Also, although union members are more likely to be employed in the private than public sector, in 2003, 37.2% of public sector employees were union members, compared to 7.2% of private sector employees.

In 2003, 12.6% of workers with a bachelor's or advanced college degree were union members, compared to 6.6% of workers with less than a high school education and 11.9% of workers with a high school degree or one to three years of college. In 2003, almost three-fourths (73.6%) of union workers with a bachelor's or advanced degree worked in the public sector, mostly for state and local governments. The largest percentage of these employees (43.6%) were teachers.

In 2003, unionization was greatest in New York, Hawaii, Michigan, Alaska, New Jersey, and Washington. Unionization was lowest in North Carolina, South Carolina, Arkansas, Mississippi, Arizona, and South Dakota.

Finally, in 2002, the most unionized occupations were precision production workers and operators (18.3% and 17.6%, respectively). The most unionized industries were public administration (32.3%) and transportation, communications, and utilities (27.4%). This report will be updated periodically.

Contents

List of Figures

List of Tables

Union Membership Trends in the United States

Many factors affect the level and distribution of employment and earnings. Individuals with more education, work experience, and job training generally earn more. Savings and investment and technological advances can affect labor productivity and real earnings. Changes in consumer tastes can influence the demand for workers with different skills. Employment and earnings may also be affected by fiscal and monetary policy and by institutional factors. Institutional factors include government regulation of industry, immigration and trade policy, and labor unions.

This report summarizes the major federal laws that give certain protections to employees who organize and bargain collectively. The report reviews the economic effects of labor unions and examines recent trends in union membership in the United States.

Major Federal Collective Bargaining Laws

The National Labor Relations Act of 1935 (NLRA) is the basic law governing relations between labor unions and private sector employers engaged in interstate commerce. The act does not cover supervisors and managers, agricultural laborers, domestic servants, and others.[1] Separate federal laws apply to railroads, airlines, and federal employees. The NLRA is administered by the National Labor Relations Board (NLRB).

The NLRA requires an employer to bargain with the representative selected by a majority of the firm's employees. The act does not require secret-ballot elections. If a majority of employees indicate a desire to be represented by a union, an employer may voluntarily enter into collective bargaining. If an employer does not voluntarily recognize the union chosen by a majority of employees, a petition can be filed with

---

[1] Agricultural laborers include crop and livestock workers and farmworkers who perform work that is incidental (e.g., sorters and packers) to the production of goods on the employer's farm. National Labor Relations Board, *Basic Guide to the National Labor Relations Act* (Washington: GPO, 1997), p. 28, available at [http://www.nlrb.gov]. (Hereafter cited as NLRB, *Basic Guide to the NLRA*..) Commerce Clearing House, *Labor Relations*, vol. 1 (Chicago: Commerce Clearing House, 2004), pp. 4168-4169. United States General Accounting Office, *Collective Bargaining Rights: Information on the Number of Workers With and Without Bargaining Rights*, Report No. GAO-02-835, Sept. 2002, pp. 12-13. (Hereafter cited as GAO, *Collective Bargaining Rights*.) The GAO is now called the Government Accountability Office.

the NLRB for a secret-ballot election. A petition may be filed by a union, a group of employees, or the employer.[2]

The Railway Labor Act of 1926 (RLA) gives railroad and airline employees the right to unionize. The act allows some supervisors (i.e., "subordinate officials") to be union members.[3]

Title VII of the Civil Service Reform Act of 1978 (CSRA) provides collective bargaining rights to federal employees. The law applies to executive branch agencies, the Library of Congress, and the Government Printing Office. The law excludes supervisors, members of the armed services, and various agencies.[4]

According to a 2002 report by the Government Accountability Office (GAO), 26 states and the District of Columbia have laws that provide collective bargaining rights to public employees. An additional 12 states have laws that give bargaining rights to specific groups of employees (e.g., teachers, firefighters, or state workers). Nine states provide bargaining rights to agricultural workers. Some state laws allow supervisors to be union members.[5]

---

[2] In order to have a secret-ballot election, it is not necessary for a majority of employees to sign a petition or authorization cards (i.e., cards authorizing a union to represent them for the purposes of collective bargaining). Employees may petition the NLRB for union representation if at least 30% of employees express a desire for union representation. NLRB, *Basic Guide to the National Labor Relations Act*, pp. 7-8. National Labor Relations Board, *The NLRB: What it is, What it Does*, National Labor Relations Board, p. 3, available at [http://www.nlrb.gov]. Workers may organize without the protections of the NLRA, but the employer would not be required to bargain.

[3] Douglas L. Leslie (editor in chief), *The Railway Labor Act* (Washington: BNA Books, 1995), pp. 118-119, 424, 428.

[4] The CSRA excludes from coverage Foreign Service employees, the Federal Bureau of Investigation, Central Intelligence Agency, Government Accountability Office, National Security Agency, Tennessee Valley Authority, the Federal Services Impasses Panel, and the Federal Labor Relations Authority. The CSRA also gives the President the authority to exclude, in the interests of national security, any agency whose primary function involves investigative, intelligence, counterintelligence, or security work. 5 U.S.C. § 7103. CRS Report RL30795, *General Management Laws: A Compendium*, coordinated by Clinton T. Brass, pp. 325-326.

[5] Local governments may have laws giving local public employees collective bargaining rights. GAO, *Collective Bargaining Rights*, pp. 8-9. Lloyd G. Reynolds, Stanley H. Masters, and Colletta H. Moser, *Labor Economics and Labor Relations*, 11th ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1998), p. 460. (Hereafter cited as Reynolds et al., *Labor Economics and Labor Relations*.)

Legislation in the 108th Congress

Legislation has been introduced in the 108th Congress that, if enacted, may affect union membership in both the private and public sectors.

S. 606, the "Public Safety Employer-Employee Cooperation Act of 2003" would provide collective bargaining rights to public safety workers (i.e., law enforcement officers, firefighters, and emergency medical services personnel) employed by state or local governments. The bill was introduced by Senator Judd Gregg and was approved by the Senate Committee on Health, Education, Labor and Pensions on October 2, 2003. A similar proposal, H.R. 814, was introduced in the House by Representative Dale Kildee. No congressional action has been taken on the latter bill.

Legislation has been introduced that would allow employees to unionize if a majority of employees sign authorization cards. A secret-ballot election would not be required. This proposal is included, with other provisions, in S. 1513 and H.R. 3078, the "Employee Right to Choose Act of 2003," and in S. 1925 and H.R. 3619, the "Employee Free Choice Act."[6] S. 1513 was introduced by Senator Charles Schumer; S. 1925 was introduced by Senator Edward Kennedy. H.R. 3078 and H.R. 3619 were introduced by Representative George Miller. No action has been taken in the House or Senate on either proposal.

Representative Charlie Norwood introduced H.R. 4343, the "Secret Ballot Protection Act of 2004." The bill would require secret-ballot elections for union certification. Employers could not voluntarily bargain with a union that has not been elected by a majority of employees in a secret-ballot election. No action has been taken on the bill.

The "National Right-to-Work Act" would amend both the NLRA and RLA. Under this measure, union contracts could not require employees to become union members as a condition of employment. The bill was introduced in the Senate by Senator Trent Lott (S. 1765) and in the House by Representative Joe Wilson (H.R. 391). No congressional action has been taken on the proposal.

Governments and Collective Bargaining

By bargaining collectively, instead of individually, unionized workers may obtain higher wages and better working conditions than if each worker bargained individually.[7] The protections that governments give employees who organize and

---

[6] For an overview of S.1925/H.R.3619, see CRS Report RS21887, *The Employee Free Choice Act*, by Jon O. Shimabukuro.

[7] The threat of a strike can increase the bargaining power of unionized workers. Unions may also be able to increase wages by limiting the supply of workers; e.g., by restricting the number of persons enrolled in union-run training programs. Federal employees cannot (continued...)

bargain collectively are intended to achieve different policy objectives. These objectives include to increase the bargaining power of employees, to reduce earnings inequality, and to provide a means for improved communication between labor and management.

Government Intervention in Labor Markets

Governments may intervene in labor markets for a number of reasons. One of these reasons is to improve competition.[8] According to economic theory, competitive markets generally result in the most efficient allocation of resources, where resources consist of individuals with different skills, capital goods (e.g., computers, machinery, and buildings), and natural resources.

In competitive labor markets workers are paid according to the value of their contribution to output. Under perfect competition, wages include compensation for unfavorable working conditions. The latter theory, called the "theory of compensating wage differentials," recognizes that individuals differ in their preferences or tolerance for different working conditions — such as health and safety conditions, hours worked, holidays and annual leave, and job security.[9]

If labor markets do not fit the model of perfect competition, increasing the bargaining power of employees may raise wages and improve working conditions to levels that might exist under competitive conditions. In labor markets where a firm

---

[7] (...continued)
strike. The employees of most, but not all, state and local governments are not allowed to strike. Where state and local government employees are allowed to strike, the right often does not include public safety employees (e.g., policemen and firefighters). Daniel Quinn Mills, *Labor-Management Relations*, 5th ed. (New York: McGraw-Hill, 1994), pp. 306-307. (Hereafter cited as Mills, *Labor-Management Relations*.) Michael H. Cimini, "1982-97 State and Local Government Work Stoppages and Their Legal Background," *Compensation and Working Conditions*, vol. 3, fall 1998, pp. 33-34. Bruce E. Kaufman, *The Economics of Labor Markets*, 4th ed., Fort Worth, Dryden Press, 1994, pp. 275-280. (Hereafter cited as Kaufman, *The Economics of Labor Markets*.) Reynolds et al., *Labor Economics and Labor Relations*, p. 406.

[8] The following conditions are generally cited as the characteristics of a competitive labor market: (1) There are many employers and many workers. Each employer is small relative to the size of the market. (2) Employers and workers are free to enter or leave a labor market and can move freely from one market to another. (3) Employers do not organize to lower wages and workers do not organize to raise wages. Governments do not intervene in labor markets to regulate wages. (4) Employers and workers have equal access to labor market information. (5) Employers do not prefer one worker over another equally qualified worker. Workers do not prefer one employer over another employer who pays the same wage for the same kind of work. (6) Employers seek to maximize profits; workers seek to maximize satisfaction. Reynolds et al., *Labor Economics and Labor Relations,* pp. 16-21.

[9] Randall K. Filer, Daniel S. Hamermesh, and Albert E. Rees, *The Economics of Work and Pay*, 6th ed. (New York: Harper Collins, 1996), pp. 376-390. (Hereafter cited as Filer et al., *The Economics of Work and Pay*.) Ronald G. Ehrenberg and Robert S. Smith, *Modern Labor Economics: Theory and Public Policy*, 7th ed. (Reading, MA: Addison-Wesley, 2000), pp. 251-259. (Hereafter cited as Ehrenberg and Smith, *Modern Labor Economics*.)

is the only employer (called a monopsony) unions can, within limits, increase both wages and employment.[10]

If labor markets are already competitive, however, economists maintain that increasing the bargaining power of employees may result in a misallocation of resources. In competitive labor markets, higher union wages may reduce employment for union workers below the levels that would exist in the absence of unionization.[11] If unions lower employment in the unionized sector, they may also increase the supply of workers to employers in the nonunion sector, lowering the wages of nonunion workers.[12]

It can be difficult to determine the competitiveness of labor markets. First, identifying the appropriate labor market may be difficult. Labor markets can be local (e.g., for unskilled labor), regional, national, or even international (e.g., for managerial and professional workers). Second, labor market competitiveness is difficult to measure, and labor markets may change because of economic, technological, or policy changes.

Distribution of Earnings

Competitive labor markets may result in a distribution of earnings that some policymakers find unacceptable. Thus, governments may intervene in labor markets to reduce inequality.[13] Unionization may be a means of reducing earnings inequality. According to some economists, greater equality may, under certain conditions (e.g., such as the Great Depression of the 1930s), also increase aggregate demand and, therefore, reduce unemployment.

---

[10] Kaufman, *The Economics of Labor Markets*, pp. 277-280.

[11] In competitive labor markets, unions can offset the employment effect of higher wages by persuading consumers to buy union-made goods (e.g., campaigns to "look for the union label"), limiting competition from foreign made goods (e.g., though tariffs or import quotas), or negotiating contracts that require more workers than would otherwise be needed to perform certain tasks. Kaufman, *The Economics of Labor Markets*, pp. 276-277. Ehrenberg and Smith, *Modern Labor Economics*, p. 493. Toke Aidt and Zafiris Tzannatos, *Unions and Collective Bargaining: Economic Effects in a Global Environment* (Washington: The World Bank, 2002), p. 27. (Hereafter cited as Aidt and Tzannatos, *Unions and Collective Bargaining*.)

[12] If unions raise the wages of union workers and lower employment in the union sector, the supply of workers available to nonunion employers may increase, causing nonunion wages to fall (the "spillover" effect). On the other hand, nonunion employers, in order to discourage workers from unionizing, may pay higher wages (the "threat" effect). Ehrenberg and Smith, *Modern Labor Economics*, pp. 504-508.

[13] Governments may also intervene in private markets to produce "public" goods (e.g., national defense) or correct instances where the market price of a good does not fully reflect its social costs or benefits — called, respectively, negative and positive "externalities." Air and water pollution are frequently cited as examples of negative externalities; home maintenance and improvements are often cited as examples of positive externalities.

Collective Voice

Finally, an argument made by some economists is that unions give workers a "voice" in the workplace. According to this argument, unions provide workers an additional way to communicate with management. For instance, instead of expressing their dissatisfaction with an employer by quitting, workers can use dispute resolution or formal grievance procedures to resolve issues relating to pay, working conditions, or other matters.[14]

Economic Effects of Labor Unions

This section summarizes the findings of selected research on the economic effects of labor unions.[15]

Earnings

Numerous studies have attempted to measure the wage differential between union and nonunion workers. The results vary. But, in general, most studies find that, after controlling for individual, job, and labor market characteristics, the wages of union workers are in the range of 10% to 30% higher than the wages of nonunion workers.[16,17]

---

[14] Richard B. Freeman and James L. Medoff, "The Two Faces of Unionism," *Public Interest*, no. 57, fall 1979, pp. 70-73. Richard B. Freeman, "The Exit-Voice Tradeoff in the Labor Market: Unionism, Job Tenure, Quits, and Separations," *Quarterly Journal of Economics*, vol. 94, June 1980, pp. 644-645.

[15] The summary is of research on U.S. labor markets, although some of the studies cited include both the United states and other countries.

[16] Filer et al, *The Economics of Work and Pay*, p. 489. Kaufman, *The Economics of Labor Markets*, p. 609. Kay E. Anderson, Philip M. Doyle, and Albert E. Schwenk, "Measuring Union-Nonunion Earnings Differences," *Monthly Labor Review*, vol. 113, June 1990, p. 26. Reynolds et al., *Labor Economics and Labor Relations*, pp. 515-517. Aidt and Tzannatos, *Unions and Collective Bargaining*, p. 42. For a review of several studies of the union-nonunion wage differential, see Javed Ashraf, "Union Wage Effects: An Overview of Recent Literature," *Labor Studies Journal*, vol. 19, summer 1994, pp. 3-24.

[17] Most, but not all, studies that use cross-sectional data have found a larger union wage premium than studies that use longitudinal data. (Kaufman, *The Economics of Labor Markets*, pp. 612-14.) A cross-sectional survey collects data at a single point in time from a sample of households or individuals. A longitudinal survey collects data at several points in time from the same sample of households or individuals. Surveys generally do not collect information on all personal characteristics that may affect individual pay; for example, motivation or work effort. By comparing the wages of individuals who move from nonunion to union jobs (or vice versa), longitudinal data can capture the effect of otherwise unobserved personal characteristics. Some research has concluded that the lower union wage premium found using longitudinal data is due to errors in measuring changes in union status. Steven Raphael, "Estimating the Union Earnings Effect Using a Sample of Displaced Workers," *Industrial and Labor Relations Review*, vol. 53, Apr. 2000, pp. 504, 513-516.

Some evidence suggests that the wage premium for union workers has declined in recent years.[18] One study concluded that, among wage and salary workers, the union wage differential in the late 1970s was approximately 21% to 23%. By 2000-2001, the analysis concluded that the differential had fallen to 14%.[19]

Total compensation consists of both wages and fringe benefits (e.g., paid sick leave, health insurance, and pension plans). Union workers generally receive better or more generous fringe benefits than similar nonunion workers. Therefore, estimates of the union wage premium may understate the difference in total compensation between union and nonunion workers. On the other hand, if working conditions are less favorable for union than nonunion workers, analyses that do not control for differences in working conditions may overstate the difference in compensation between union and nonunion workers.[20,21]

The wage premium for union workers is generally larger for less skilled than for more skilled workers, greater for blue-collar than white-collar workers, larger for younger than older workers, and larger for less educated workers (high school graduates or high school dropouts) than college graduates. As a result, unions tend to compress wages (i.e., reduce inequality) within unionized sectors of the

---

[18] Barry T. Hirsch, "Reconsidering Union Wage Effects: Surveying New Evidence on an Old Topic," *Journal of Labor Research*, vol. 25, spring 2004, pp. 245-252. Peter Turnbull, "What Do Unions Do Now?" *Journal of Labor Research*, vol. 24, summer 2003, p. 493. Kaufman, *The Economics of Labor Markets*, pp. 617-19. July 13, 2004. David G. Blanchflower and Alex Bryson, *What Effect Do Unions Have on Wages Now and Would "What Do Unions Do?" Be Surprised?*, National Bureau of Economic Research, Working Paper 9973, Sept. 2003, p. 9. (Hereafter cited as Blanchflower and Bryson, *What Effect Do Unions Have on Wages Now?*)

[19] The analysis is for wage and salary workers ages 16 and over. The analysis controls for both worker and job characteristics (e.g., education, potential work experience, marital status, race, gender, region, large metropolitan area, part-time employment, industry, and occupation). Barry T. Hirsch and David A. Macpherson, *Union Membership and Earnings Data Book: Compilations from the Current Population Survey* (Washington: Bureau of National Affairs, 2003), pp. 1-2, 7, 19.

[20] Filer et al, *The Economics of Work and Pay*, p. 493. Aidt and Tzannatos, *Unions and Collective Bargaining*, pp. 73-75. Kaufman, *The Economics of Labor Markets*, pp. 607, 629. Reynolds, et al., *Labor Economics and Labor Relations*, pp. 517-19. Ehrenberg and Smith, *Modern Labor Economics*, pp. 510-511.

[21] Some research has concluded that, for blue-collar workers, unionized firms tend to have more structured work settings, more hazardous jobs, less flexible work hours, a faster work pace, lower job satisfaction, and less employee control over the assignment of overtime hours. Therefore, part of the estimated union-nonunion earnings differential may compensate union workers for unfavorable working conditions. Ehrenberg and Smith, *Modern Labor Economics*, pp. 510-511. Kaufman, *The Economics of Labor Markets*, p. 613.

economy.[22] Some evidence suggests that unions reduce earnings inequality in the overall economy.[23,24]

Private and Public Sectors

The wage gap between union and nonunion workers is generally larger in the private sector than in the public sector. Within the public sector, evidence suggests that the wage premium for union workers is greater for local government employees than for federal employees.[25]

Gender

Research has concluded that there is very little, if any, difference in the union wage premium between men and women.[26]

Race

Some, but not all, evidence indicates that the union wage premium is greater for nonwhites than whites. Some studies do not find a difference in the union wage premium between blacks and whites; other research concludes that the wage premium for black workers is 5 to 10 percentage points higher than the wage premium for white workers.[27]

---

[22] Blanchflower and Bryson, *What Effect Do Unions Have on Wages Now?* p. 8. David G. Blanchflower, *Changes Over Time in Union Relative Wage Effects in Great Britain and the United States*, National Bureau of Economic Research, Working Paper 6100, July 1997, p. 30. Aidt and Tzannatos, *Unions and Collective Bargaining*, pp. 53-54. Ehrenberg and Smith, *Modern Labor Economics*, p. 509.

[23] Filer et al, *The Economics of Work and Pay*, pp. 503-504. Reynolds et al., *Labor Economics and Labor Relations*, p. 527.

[24] For an examination of trends in the distribution of earnings among wage and salary workers, see CRS Report RL31616, *The Distribution of Earnings of Wage and Salary Workers in the United States, 1994-2002*, by Gerald Mayer.

[25] Aidt and Tzannatos, *Unions and Collective Bargaining*, pp. 52-53. Ehrenberg and Smith, *Modern Labor Economics*, p. 508. Kaufman, *The Economics of Labor Markets*, p. 626.

[26] Blanchflower and Bryson, *What Effect Do Unions Have on Wages Now?* p. 10. Kaufman, *The Economics of Labor Markets*, p. 612. Aidt and Tzannatos, *Unions and Collective Bargaining*, p. 49.

[27] Lawrence Mishel, Jared Bernstein, Heather Boushey, *The State of Working America: 2002/2003* (Ithaca: Cornell University Press, 2003), pp. 191-192. Aidt and Tzannatos, *Unions and Collective Bargaining*, pp. 50-51. Ehrenberg and Smith, *Modern Labor Economics*, p. 509.

Job Tenure and Quit Rates

Job tenure tends to be greater and quit rates lower among unionized workers.[28] Higher wages attract more applicants, resulting in larger applicant queues, giving employers a larger pool from which to hire qualified workers. As a result, some evidence indicates that the "quality" of union workers may be better than that of nonunion workers doing the same kind of work.[29] Quit rates may also be lower among union employees if unions give workers and management a means to improve communications and resolve issues.

Productivity

Unions can potentially have both beneficial and harmful effects on labor productivity. Restrictive work rules may harm productivity by limiting the ability of management to assign work or introduce new technology. Higher wages may reduce investment in equipment and lower spending on research and development. On the other hand, higher wages may attract better workers and cause employers to substitute machinery and equipment for labor (i.e., increasing the amount of fixed capital per worker). A lower quit rate may create an incentive for employers to provide more firm-specific training. Union firms may also hire more professional managers and adopt more efficient management practices.[30]

Evidence on the effect of unions on labor productivity is mixed. According to some research, the effect of unions on productivity varies across industries.[31] Some

---

[28] Aidt and Tzannatos, *Unions and Collective Bargaining*, p. 65. Reynolds et al., *Labor Economics and Labor Relations*, pp. 535-537.

[29] Filer et al, *The Economics of Work and Pay*, pp. 284-285, 493. In theory, persons will voluntarily change jobs if the expected gain from changing jobs (where one is offered) is greater than the expected gain from staying in the job they have, less the cost of changing jobs.

[30] For a summary of the beneficial and harmful effects of unions on labor productivity, see Chrisom Doucouliagos and Patrice Laroche, "What Do Unions Do to Productivity? A Meta-Analysis," *Industrial Relations*, vol. 42, Oct. 2003, pp. 651-655.

[31] In office building construction, unionized workers were found to be more productive than nonunion workers. A study of the cement industry concluded that labor productivity was greater in unionized firms. (Filer et al, *The Economics of Work and Pay*, p. 514.) According to one study, labor unions have no affect on productivity growth in manufacturing, but have a negative effect on productivity in the construction industry. (Steven Allen, "Productivity Levels and Productivity Change Under Unionism," *Industrial Relations*, vol. 27, winter 1988, pp. 103-104, 107-108.) A study of underground coal mines concluded that unions organized workers in more productive mines, which accounted for a positive relationship between unions and productivity. After controlling for differences in mine productivity, the study concluded that unions have a negative effect on productivity. (Brian Chezum and John E. Garen, "Are Union Productivity Effects Overestimated? Evidence from Coal Mining," *Applied Economics*, vol. 30, July 1998, p. 918.) A study of western U.S. sawmills concluded that productivity was lower in unionized than in nonunionized mills. (Merwin W. Mitchell and Joe A. Stone, "Union Effects on Productivity: Evidence from Western U.S.

(continued...)

research has concluded that the effect of unions on productivity may depend, in part, on the quality of labor-management relations. In particular, if unions improve labor management communications, unions may have a positive effect on productivity.[32]

Profits

Finally, research suggests that unions reduce a firm's rate of profit. Some evidence indicates that the effect of unions on profits is greater in concentrated industries where profits may be relatively higher because firms have the ability to influence the prices of their products.[33,34] Other research concludes that unions reduce profits in general, regardless of the ability of firms to influence prices.[35]

Trends in Union Membership

Union membership in the United States has declined significantly in recent decades. The number of union members peaked in 1979 at an estimated 21.0 million.[36] In 2003, an estimated 15.8 million workers were union members. See **Table A1** in **Appendix A**.[37]

As a percent of workers, union membership can be represented in different ways (e.g., as a percent of the labor force or as a percent of wage and salary workers). Each approach has its advantages and disadvantages. The labor force includes both employed and unemployed workers. Union membership as a percent of the labor force would be the broadest measure of union membership. But such a measure may be more sensitive than other measures to changes in the unemployment rate. Union

---

[31] (...continued)
Sawmills," *Industrial and Labor Relations Review*, vol. 46, Oct. 1992, pp. 141-142.)

[32] Kaufman, *The Economics of Labor Markets*, pp. 631-634. Reynolds et al., *Labor Economics and Labor Relations*, pp. 537-540. Ehrenberg and Smith, *Modern Labor Economics*, p. 512. Aidt and Tzannatos, *Unions and Collective Bargaining*, p. 70.

[33] Aidt and Tzannatos, *Unions and Collective Bargaining*, p. 68. Filer et al., *The Economics of Work and Pay*, pp. 515-516. Ehrenberg and Smith, *Modern Labor Economics*, pp. 512-513. Barry T. Hirsch, "Union Coverage and Profitability Among U.S. Firms," *Review of Economics and Statistics*, vol. 73, Feb. 1991, pp. 74-76. Paula B. Voos and Lawrence R. Mishel, "The Union Impact on Profits: Evidence from Industry Price-Cost Margin Data," *Journal of Labor Economics*, vol. 4, Jan. 1986, pp. 105-109.

[34] A common measure of economic concentration is the percent of industry output accounted for by the four largest firms. Paul A. Samuelson and William D. Nordhaus, *Microeconomics*, 16th ed. (New York: McGraw-Hill, 1992), pp. 170-171.

[35] William F. Chappell, Walter J. Mayer, and William F. Shughart II, "Union Rents and Market Structure Revisited," *Journal of Labor Research*, vol. 12, winter 1991, pp. 35-37.

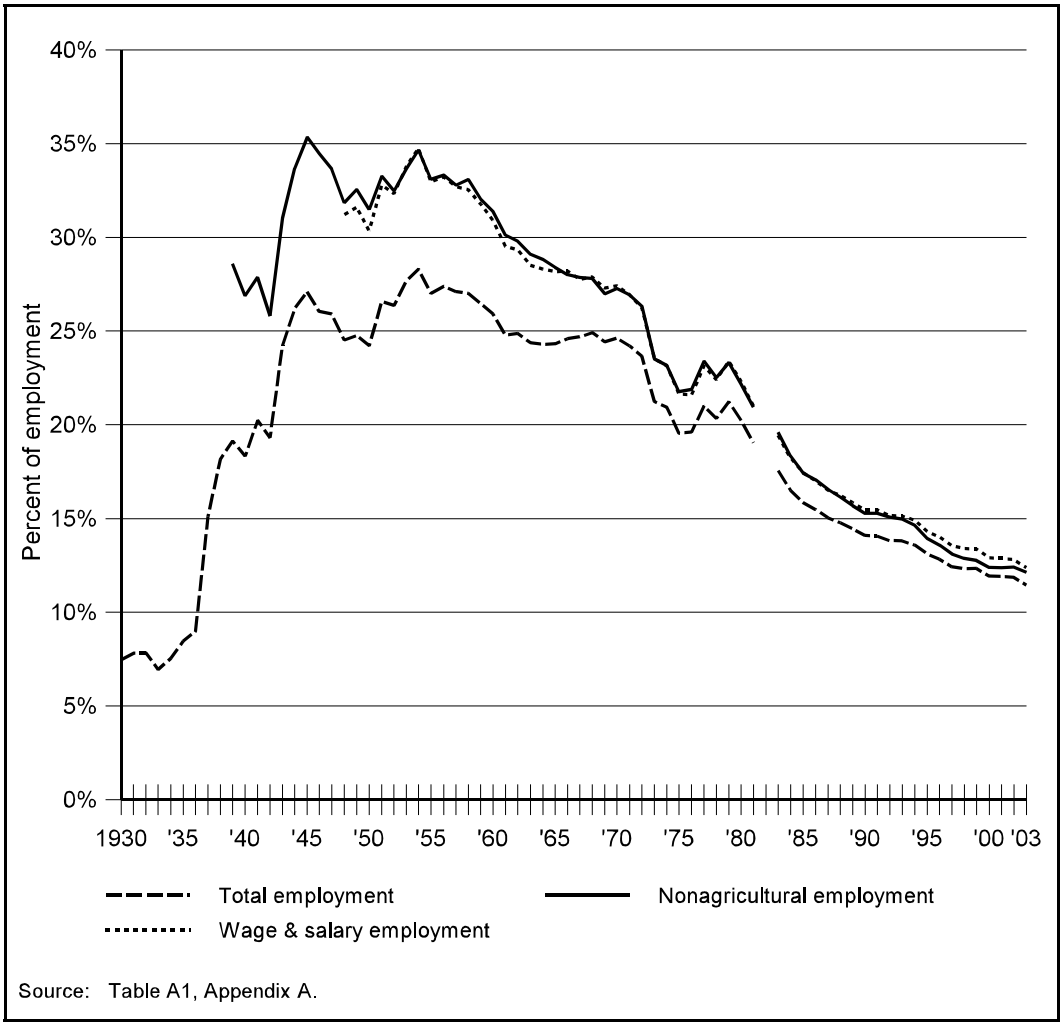
[36] Beginning in 1977 a union member is a wage and salary worker who belongs to a labor union or an employee association that is similar to a union.

[37] The percentages shown in the graphs in this report are based on the estimates shown in the tables in **Appendix A**.

membership is often represented as a percent of nonagricultural employment. Although union membership in the agriculture industry is small, such calculations may exclude from the denominator an industry that is included in the numerator. Union membership is also represented as a percent of wage and salary employment. One of the possible economic effects of unions, however, is that they may reduce employment in the union sector of the economy and increase the supply of labor to the nonunion sector of the economy. This is called the "spillover" effect. The nonunion sector of the economy includes both nonunion wage and salary workers and nonunion self-employed workers. Workers not in the union sector have the option, therefore, of nonunion wage and salary employment or nonunion self-employment. But self-employed workers are, in effect, both employer and employee and, therefore, do not unionize.

Figure 1 shows union membership as a percent of three measures of employment: (a) total employment, (b) wage and salary employment, and (c)

Figure 1. Union Membership as a Percent of Employment, 1930-2003



Source: Table A1, Appendix A.

nonagricultural wage and salary employment.[38] Union membership as a percent of employed workers is lower than union membership as a percent of wage and salary workers. Reflecting the relative decline in agricultural employment and the number of self-employed workers, the three series have converged somewhat over the past half century.[39]

As a percent of nonagricultural employment, union membership peaked at 35.4% in 1945. As a percent of wage and salary employment and a percent of total employment, union membership peaked in 1954 at 34.8% and 28.3%, respectively. In 2003, 12.4% of wage and salary workers, 12.1% of nonagricultural workers, and 11.5% of all employed workers were union members.

Some workers are represented by a collective bargaining agreement but are not union members. In 2003, an estimated 1.7 million workers were covered by a union contract but were not union members. From 1994 to 2003, the percentage of employed workers who were represented by a union fell from 1.7% to 1.2%.[40]

If the union wage premium has declined in recent years (as discussed above), lower union membership may account for part of this decline. The decline in union membership may have also moderated some of the other economic effects of unions discussed above (e.g., on profitability and productivity).

Characteristics of Union Membership

This section examines selected demographic, social, and economic characteristics of union members in the United States. The analysis examines trends in union membership from 1994 to 2003 (or 2002, for industry and occupation). The analysis examines union membership as a percent of employed persons ages 16 and over. The data are from the monthly Current Population Survey (CPS), which is conducted by the Census Bureau for the Bureau of Labor Statics (BLS). See **Appendix B** for a description of data and methodology.

---

[38] The definition of wage and salary workers used by the Bureau of Labor Statistics (BLS) includes incorporated self-employed workers. Self-employed incorporated workers are employees of a corporation. In its calculations of union membership rates, however, BLS generally excludes both incorporated and unincorporated self-employed workers.

[39] From 1948 to 2003, the percentage of workers employed in agriculture declined from 13.1% to 1.7%. U.S. Department of Labor, Bureau of Labor Statistics, *Labor Force Statistics Derived From the Current Population Survey, 1948-87*, Bulletin 2307, Aug. 1988, p. 625. U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, vol. 51, Jan. 2004, p. 219. For a discussion of the trend in self-employment, see CRS Report RL32387, *Self-Employment as a Contributor to Job Growth and as an Alternative Work Arrangement*, by Linda Levine.

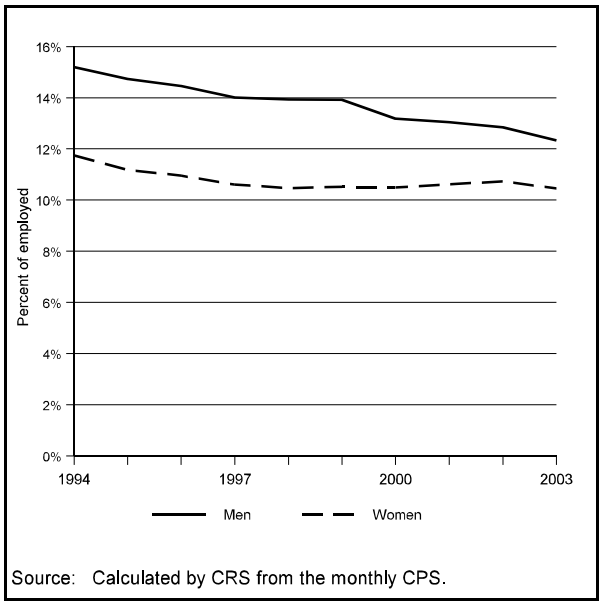
[40] Unless stated otherwise, the differences and changes in union membership or coverage discussed in the text are significant at the 95% confidence level. See **Appendix B** for a discussion of confidence levels.

Gender

Figure 2 shows that men are more likely than women to be union members. In 2003, 12.3% of men were union members, compared to 10.5% of women. From 1994 to 2003, union membership declined among both men and women. The decline in union membership was greater for men (2.9 percentage points) than for women (1.3 percentage points).

Table A2 in **Appendix A** also shows theat union members are more likely to be male than female.

Figure 2. Union Membership Rates of Men and Women, 1994-2003



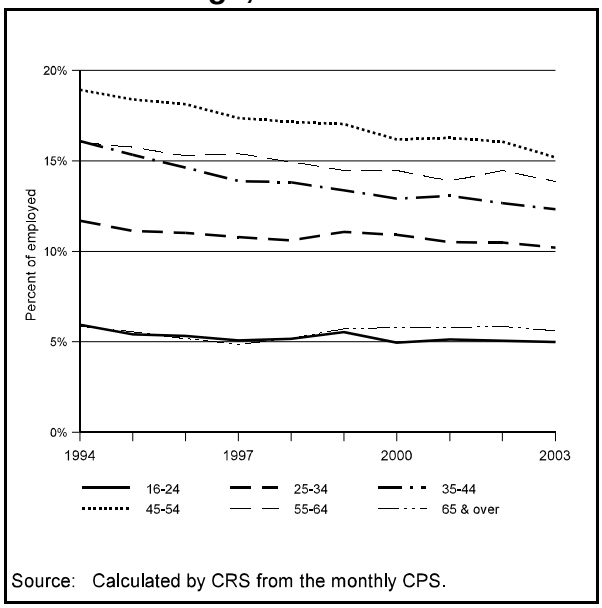
Source: Calculated by CRS from the monthly CPS.

Age

Figure 3 shows that workers between the ages of 45 and 64 are more likely than younger workers or workers ages 65 and over to be union members. In 2003, 14.7% of workers ages 45 to 64 were union members. By comparison, 5.0% of workers ages 16 to 24 and 11.3% of workers ages 25 to 44 were union members.

From 1994 to 2003, except for persons ages 65 and over, union membership declined among all age groups. The largest declines were among persons ages 35-44 (3.8 percentage points) and persons ages 45-54 (3.7 percentage points).[41]

Figure 3. Union Membership Rates by Age, 1994-2003



Source: Calculated by CRS from the monthly CPS.

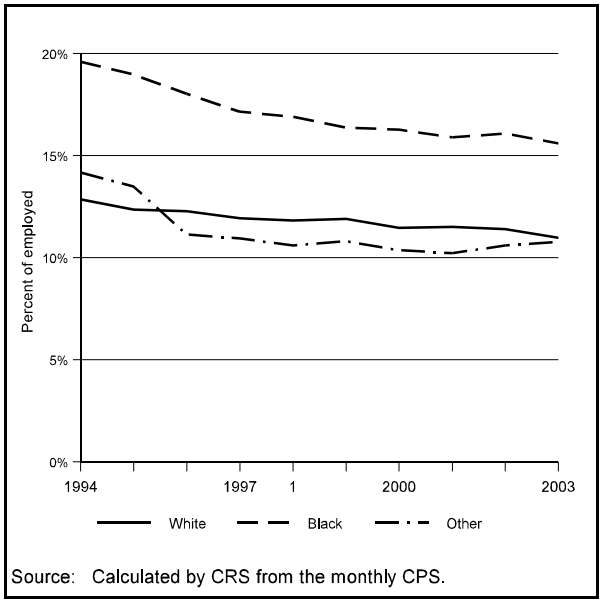
[41] From 1994 to 2003, union membership among persons ages 45 to 64 increased (from 6.2 to 7.1 million), while membership among persons under 45 decreased (from 10.3 to 8.4 million). However, during the period, the percentage of employed workers ages 45 to 64 increased from 28.1% to 35.2%. From 1994 to 2003, the percentage of union members who were between 45 and 64 increased from 37.2% to 45.3%. See **Table A3**.

Table A3 shows that, in 2003, over half (58.0%) of union members were between the ages of 35 and 54.

Race

A majority of union members are white: 79.5% in 2003. However, **Figure 4** shows that blacks are more likely than whites or other races to be union members. In 2003, 15.6% of blacks were union members, compared to 11.0% of whites.

Figure 4. Union Membership Rates by Race, 1994-2003



Source: Calculated by CRS from the monthly CPS.

From 1994 to 2003, union membership declined for all racial groups. Union membership among blacks declined by 4.0 percentage points, and by 1.9 percentage points among whites.[42]

One reason for the higher rate of union membership among blacks is that blacks are more likely to be employed in the public sector, where union membership is greater than in the private sector (see "Private and Public Sectors" below). In 2003, 15.0% of public sector workers were black, compared to 10.0% of private sector workers. (See **Appendix B** for an explanation of how individuals are categorized by race.)

Hispanic Origin

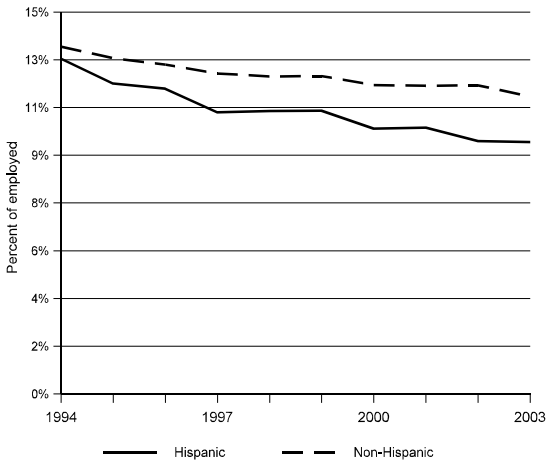
Figure 5 shows that union membership is greater among non-Hispanic workers than among Hispanic workers.[43] In 2003, 11.7% of non-Hispanic workers were union members, compared to 9.9% of Hispanic workers.

[42] The estimates for 2003 of the number of workers by race are not strictly comparable to estimates for earlier years. See **Appendix B**.

[43] Hispanics can be of any race.

From 1994 to 2003, the number of Hispanic workers increased from 10.8 to 17.3 million. During this period, Hispanic workers as a percentage of employed workers increased from 8.8% to 12.6%. Reflecting the increase in the number of Hispanic workers, the number of unionized Hispanic workers increased from 1.4 to 1.7 million. However, the decline in union membership from 1994 to 2003 was greater among Hispanic (3.3 percentage points) than non-Hispanic workers (2.0 percentage points).[44]

Figure 5. Union Membership Rates by Hispanic Origin, 1994-2003

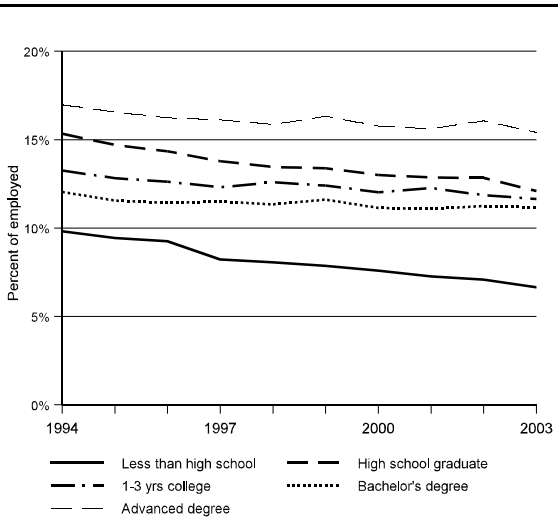


Source: Calculated by CRS from the monthly CPS.

Educational Attainment

Figure 6 shows that workers with less than a high school education are least likely to be union members, while workers with advanced college degrees are most likely to be union members. In 2003, 6.6% of workers who had not graduated from high school were union members, compared to 15.4% of workers with an advanced degree. But more union members have only a high school education or less (6.1 million in 2003) than have a bachelor's or advanced degree (5.1 million in 2003).

Figure 6. Union Membership Rates by Level of Education, 1994-2003



Source: Calculated by CRS from the monthly CPS.

From 1994 to 2003, union membership declined among all educational groups. The decline was greatest among workers with a high school education or less.

The percentage of union members with a bachelor's or advanced degree has increased. In 1994, 46.6% of union members had a high school education or less;

[44] The estimate of the number of Hispanic workers for 2003 is not strictly comparable to estimates for earlier years. See **Appendix B**.

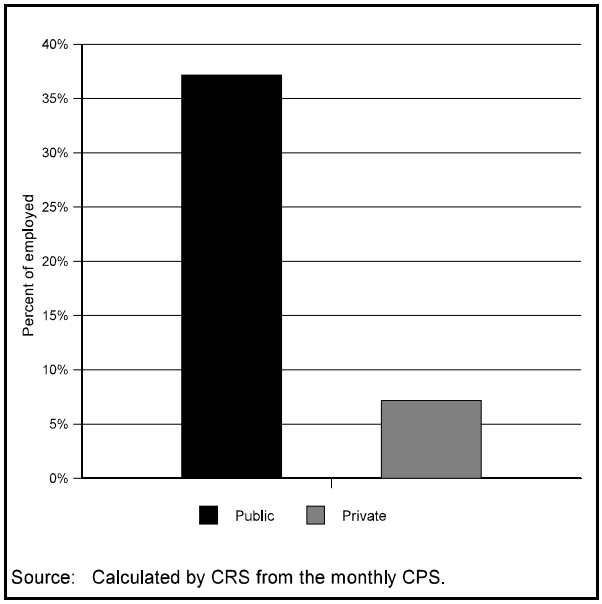
25.3% had a bachelor's or advanced degree. By 2003, 38.7% of union members had a high school education or less, and 32.1% had a bachelor's or advanced degree.

In 2003, almost three-fourths (73.6%) of union members with a bachelor's or advanced degree were employed in the public sector, mostly for state (16.4%) and local (52.4%) governments. The largest percentage of these employees (43.6%) were preschool, elementary, secondary, and special education teachers.

Private and Public Sectors

Union members are more likely to be employed in the private than the public sector. In 2003, an estimated 8.5 million union members were employed in the private sector, compared to an estimated 7.3 million union members employed in the public sector. However, **Figure 7** shows that the rate of union membership in the public sector is significantly greater than in the private sector. In 2003, 37.2% of public sector employees and 7.2% of private sector employees were union members. In addition, from 1994 to 2003, the percentage of union members employed in the public sector increased from 42.4% to 46.4%.

Figure 7. Union Membership Rates in the Public and Private Sectors, 2003



Source: Calculated by CRS from the monthly CPS.

From 1994 to 2003, union membership declined from 38.7% to 37.2% in the public sector and from 9.2% to 7.2% in the private sector.

The relative increase in the number of union members who are employed in the public sector may account for part of the reported decline in the union wage premium (i.e., the union wage premium is smaller in the public than private sector). In addition, some evidence suggests that the decline in union membership in the private sector has contributed to rising earnings inequality.[45]

Several reasons have been given for the decline in union membership in the private sector. Changes in employment by industry, occupation, and region are often cited as contributing factors.[46] Historically, unionization in the private sector has

---

[45] Martin A. Asher and Robert H. DeFina, "The Impact of Changing Union Density on Earnings Inequality: Evidence from the Private and Public Sectors," *Journal of Labor Research*, vol.18, summer 1997, pp. 426.

[46] Henry S. Farber, "The Decline of Unionization in the United States: What Can be (continued...)

been greatest in four industrial groups: construction; manufacturing; mining; and transportation, utilities, and communications. From 1994 to 2002, the percentage of workers employed in manufacturing and mining declined from 16.9% to 13.6%.[47] Blue-collar jobs as a percent of total employment declined from 25.5% to 23.6%.[48] And the share of employment in the mountain and southern states, where there tends to be less unionization, has increased. From 1994 to 2003, the share of the workers employed in the mountain states increased from 6.0% to 6.7% and in the south Atlantic states from 18.0% to 18.5%. See **Appendix B** for regional state groupings.

Increased competition is also cited as a reason for the decline in union membership in the private sector. In some industries (e.g., airlines, trucking, and telecommunications), deregulation has increased competition among existing firms and led to the entry of nonunion employers.[49] Increased foreign competition has also led American firms to look for ways to lower costs. Unionized firms may seek wage concessions from unionized workers or move production to nonunion locations.[50,51]

In addition, employers may have become more sensitive to employee concerns, resulting in greater job satisfaction among nonunion workers and reducing the demand for unionization. On the other hand, management may have become more sophisticated in opposing attempts by workers to unionize.[52]

Slower employment growth in union firms may have also contributed to the decline in the proportion of the workforce that is organized.[53]

---

[46] (...continued)
Learned from Recent Experience?" *Journal of Labor Economics*, vol. 8, no. 1, pt. 2, 1990, p. S76.

[47] From 1994 to 2002, the percentage of workers employed in construction and in transportation, communications, and utilities increased from 13.1% to 14.1%. See **Table A9**.

[48] Blue-collar workers are defined here as the sum of "precision production, craft, and repair" workers and "operators, fabricators, and laborers." See **Table A10**.

[49] James Peoples, "Deregulation and the Labor Market," *Journal of Economic Perspectives*, vol. 12, summer 1998, pp. 111-112.

[50] Reynolds et al., *Labor Economics and Labor Relations*, pp. 421-426.

[51] In the United States the total level of trade (exports plus imports) as a share of gross domestic product (GDP) grew from 9% in 1960 to 22% in 2000. CRS Report RL32350, *Deindustrialization of the U.S. Economy: The Roles of Trade, Productivity, and Recession*, by Craig K. Elwell.

[52] Mills, *Labor-Management Relations*, pp. 80-81. Reynolds et al., *Labor Economics and Labor Relations*, pp. 427-428. For a discussion of management efforts to discourage unionization, see Morris M. Kleiner, "Intensity of Management Resistance: Understanding the Decline of Unionization in the Private Sector," *Journal of Labor Research*, vol. 22, summer 2001, pp. 519-540.

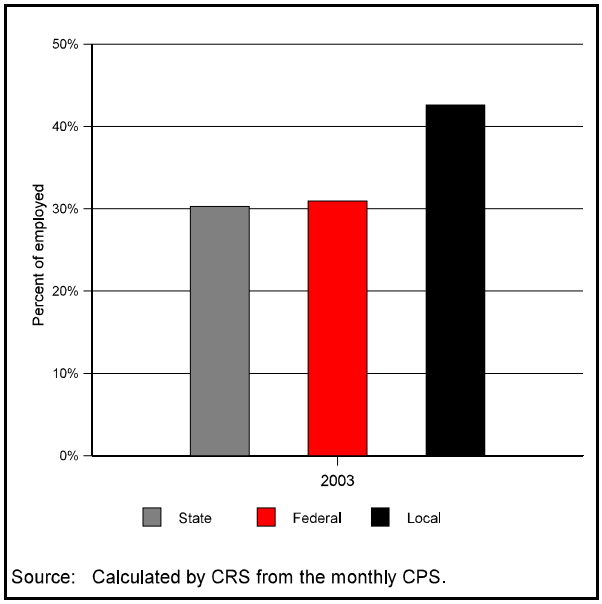
[53] According to one review of the literature, studies have typically found that employment growth in nonunionized firms is three to five percentage points greater than in unionized firms. (Aidt and Tzannatos, *Unions and Collective Bargaining*, p. 64.) A study of (continued...)

Finally, governments and employers may provide benefits formerly provided by unions, reducing the demand for union representation. For instance, government health and safety laws may substitute for demands formerly included in collective bargaining agreements.[54] Similarly, governments and employers may provide fringe benefits — such as unemployment compensation or retirement benefits — that were formerly provided by unions.[55]

Level of Government

The public sector includes the federal, state, and local governments. **Figure 8** shows that union membership is greater at the local level than at the federal or state levels. In 2003, 42.6% of employees of local governments were union members, compared to 30.9% of federal workers and 30.3% of state workers.

Figure 8. Union Membership Rates by Level of Government, 2003



Source: Calculated by CRS from the monthly CPS.

From 1994 to 2003 union membership declined at the federal and local levels, but not at the state level.

Local governments include elementary and secondary schools and fire and police departments. In 2003, 42.6% of unionized local government employees were preschool, elementary, secondary, and special education teachers, teacher assistants, and education administrators. Another 13.7% were police officers, firefighters, and correctional officers.

---

[53] (...continued)
manufacturing plants in California concluded that the annual rate of growth in employment was two to four percentage points lower in union than nonunion firms. Jonathan S. Leonard, "Unions and Employment Growth," *Industrial Relations*, vol. 31, winter 1992, pp. 82, 91.

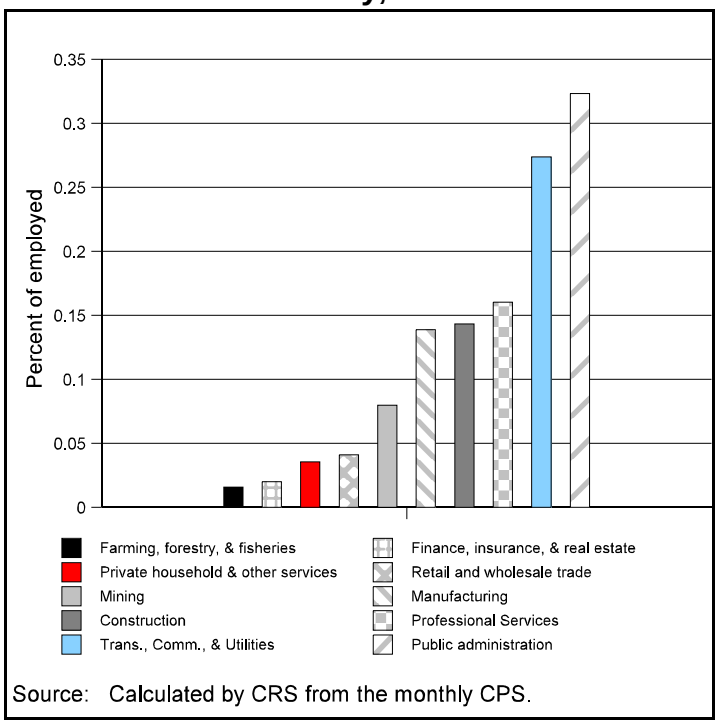
[54] George R. Neumann and Ellen R. Rissman, "Where Have All the Union Members Gone?" *Journal of Labor Economics*, vol. 2, no. 2, 1984, p. 176.

[55] Martin A. Ahser and Robert H. DeFina, "Has Deunionization Led to Higher Earnings Inequality?" *Federal Reserve Bank of Philadelphia Business Review*, Nov/Dec. 1995, pp. 8-9.

Industry

Figure 9 shows union membership by major industry in 2002. The least unionized industries in 2002 were farming (1.6%), finance, insurance, and real estate (2.0%), and private household and other services (3.6%). The most unionized industries were public administration (32.3%) and transportation, communications, and utilities (27.4%).

Figure 9. Union Membership Rates by Industry, 2002



Source: Calculated by CRS from the monthly CPS.

From 1994 to 2003, the largest percentage declines in union membership were in mining; transportation, communications, and utilities; and manufacturing. In mining, union membership fell from 15.0% to 8.0%. In transportation, communications, and utilities membership fell from 32.8% to 27.4% and in manufacturing membership fell from 17.5% to 13.9%.[56]

Occupation

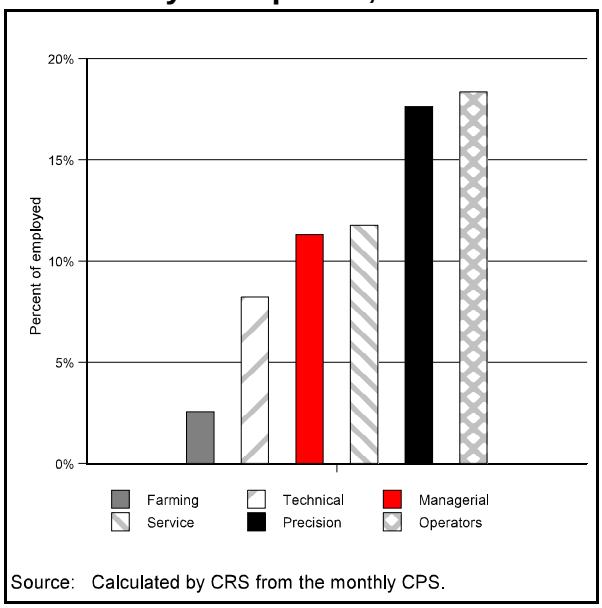
Figure 10 shows union membership by major occupation for 2002. The least unionized workers are farm workers. (Recall that crop and harvest workers are not covered by the NLRA and that most states do not have laws that provide collective bargaining rights to farmworkers.)

In 2002, unionization was greatest among precision production workers and operators (18.3% and 17.6%, respectively). Precision production workers include car, truck, and aircraft mechanics, machinists, plumbers, electricians, carpenters, mine workers, butchers, bakers, and others. Operators include machine operators, truck and bus drivers, train operators, assemblers, laborers, and others.

[56] From 1994 to 2002, the number of unionized workers in the construction and professional services industries increased from 6.0 to 7.0 million. But the share of total workers employed in these industries increased from 29.7% to 32.5%. See **Table A9**.

From 1994 to 2002, union membership declined in all occupations except farming. The drop in union membership was greatest in the most unionized occupations. Unionization among operators declined by 4.7 percentage points and by 2.5 points among precision production workers.[57]

Figure 10. Union Membership Rates by Occupation, 2002

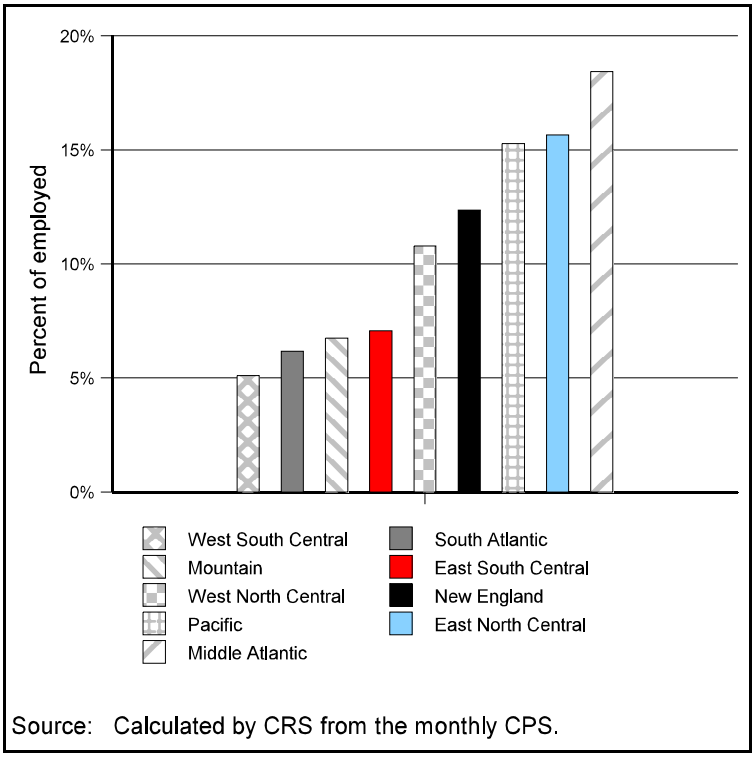


Source: Calculated by CRS from the monthly CPS.

Region

Figure 11 shows union membership by region for 2003. The nine regions are based on state groupings used by the Census Bureau. See **Appendix B** for a list of states by regions. **Figure 11** shows that, in 2003, the most unionized regions were the mid-Atlantic region, the Pacific region, and the east north central United States. The least unionized regions were the south and mountain regions. From 1994 to 2003, union membership declined in every region of the United States.

Figure 11. Union Membership Rates by Region, 2003



Source: Calculated by CRS from the monthly CPS.

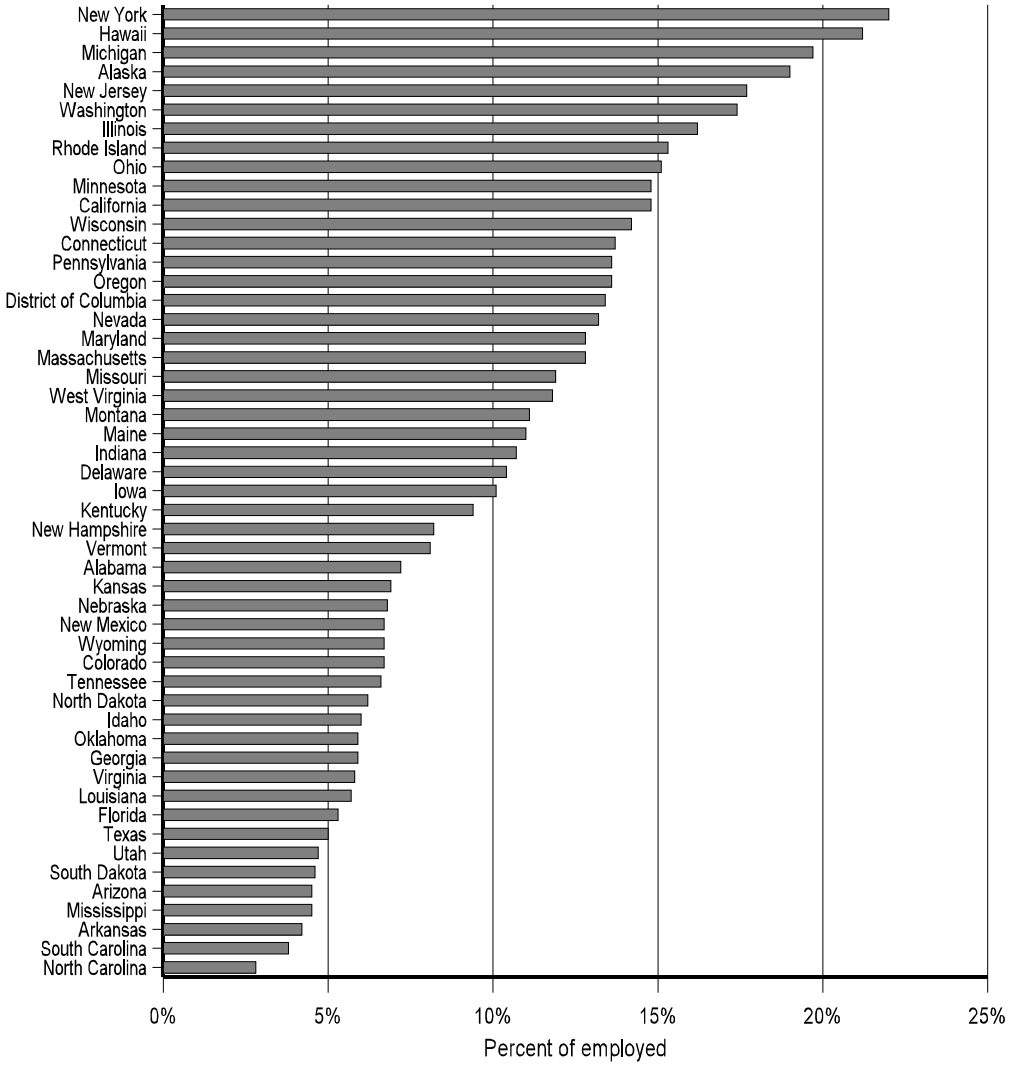
Within regions, unionization varies by state. In 2003, the 10 most unionized states were New York, Hawaii, Michigan, Alaska, New Jersey, Washington, Illinois, Rhode Island, Ohio,

[57] Union membership as a percent of employed workers declined among managerial and professional employees, but the number of unionized managerial and professional workers increased from 4.1 to 4.8 million. From 1994 to 2002, the percentage of workers in managerial and professional occupations increased from 27.4% to 31.2%. See **Table A10**.

and Minnesota and California (Minnesota and California tied for 10th). See **Figure 12**.

The 10 least unionized states (from lowest to highest) were North Carolina, South Carolina, Arkansas, Mississippi, Arizona, South Dakota, Utah, Texas, Florida, and Louisiana.

Figure 12. Union Membership Rates, by State, 2003



Source: Calculated by CRS from the monthly CPS.

Appendix A: Annual Data

Table A1. Union Membership in the United States, 1930-2003

Year	Union Members (In 1000s)	Percent of Wage and Salary Workers	Percent of Nonagricultural Workers	Percent of Employed Workers
2003	15,776	12.4%	12.1%	11.5%
2002	16,183	12.8%	12.4%	11.9%
2001	16,315	12.9%	12.4%	11.9%
2000	16,334	12.9%	12.4%	11.9%
1999	16,477	13.4%	12.8%	12.3%
1998	16,211	13.4%	12.9%	12.3%
1997	16,110	13.6%	13.1%	12.4%
1996	16,269	14.0%	13.6%	12.8%
1995	16,360	14.3%	13.9%	13.1%
1994	16,740	14.9%	14.6%	13.6%
1993	16,598	15.1%	15.0%	13.8%
1992	16,390	15.2%	15.1%	13.8%
1991	16,568	15.5%	15.3%	14.1%
1990	16,740	15.5%	15.3%	14.1%
1989	16,961	15.9%	15.7%	14.5%
1988	17,002	16.2%	16.1%	14.8%
1987	16,913	16.5%	16.6%	15.0%
1986	16,975	17.0%	17.1%	15.5%
1985	16,996	17.4%	17.4%	15.9%
1984	17,340	18.2%	18.3%	16.5%
1983	17,717	19.5%	19.6%	17.6%
1982	N.A.	N.A.	N.A.	N.A.
1981	19,123	21.0%	20.9%	19.0%
1980	20,095	22.3%	22.2%	20.2%
1979	20,986	23.4%	23.3%	21.2%
1978	19,548	22.4%	22.5%	20.4%
1977	19,335	23.2%	23.4%	21.0%
1976	17,403	21.6%	21.9%	19.6%
1975	16,778	21.6%	21.8%	19.5%
1974	18,177	23.2%	23.2%	20.9%
1973	18,089	23.5%	23.5%	21.3%
1972	19,435	26.3%	26.3%	23.7%
1971	19,211	26.9%	26.9%	24.2%
1970	19,381	27.4%	27.3%	24.6%
1969	19,036	27.3%	27.0%	24.4%
1968	18,916	27.9%	27.8%	24.9%
1967	18,367	27.8%	27.9%	24.7%
1966	17,940	28.2%	28.0%	24.6%
1965	17,299	28.2%	28.4%	24.3%
1964	16,841	28.3%	28.8%	24.3%
1963	16,524	28.5%	29.1%	24.4%
1962	16,586	29.3%	29.8%	24.9%
1961	16,303	29.5%	30.1%	24.8%
1960	17,049	30.9%	31.4%	25.9%
1959	17,117	31.8%	32.1%	26.5%
1958	17,029	32.5%	33.1%	27.0%
1957	17,369	32.7%	32.8%	27.1%
1956	17,490	33.2%	33.3%	27.4%
1955	16,802	33.0%	33.1%	27.0%

Year	Union Members (In 1000s)	Percent of Wage and Salary Workers	Percent of Nonagricultural Workers	Percent of Employed Workers
1954	17,022	34.8%	34.7%	28.3%
1953	16,948	33.8%	33.7%	27.7%
1952	15,892	32.3%	32.5%	26.4%
1951	15,946	32.8%	33.3%	26.6%
1950	14,267	30.4%	31.5%	24.2%
1949	14,282	31.6%	32.6%	24.8%
1948	14,319	31.2%	31.9%	24.5%
1947	14,787		33.6%	25.9%
1946	14,395		34.5%	26.1%
1945	14,322		35.4%	27.1%
1944	14,146		33.7%	26.2%
1943	13,213		31.0%	24.3%
1942	10,380		25.8%	19.3%
1941	10,201		27.9%	20.3%
1940	8,717		26.9%	18.3%
1939	8,763		28.6%	19.2%
1938	8,034			18.2%
1937	7,001			15.1%
1936	3,989			9.0%
1935	3,584			8.5%
1934	3,088			7.6%
1933	2,689			6.9%
1932	3,050			7.8%
1931	3,310			7.8%
1930	3,401			7.5%

Sources: The estimates of union membership and the total number of persons employed for 1994-2003 were calculated by CRS from the monthly Current Population Survey (CPS). Estimates of union membership for 1973-1993 are from: Barry T. Hirsch and David A. Macpherson, *Union Membership and Earnings Data Book: Compilations from the Current Population Survey*, Washington, Bureau of National Affairs, 2003, p. 11. Union membership data for 1930-1972 are from: U.S. Department of Labor, Bureau of Labor Statistics, *Handbook of Labor Statistics*, Bulletin 1865, U.S. Govt. Print. Off., 1975, p. 389. Estimates of the number of persons employed for 1930-1993 are from: U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, vol. 50, Jan. 2003, p. 158 and U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, vol. 41, Jan. 1994, p. 182. Estimates of the number of wage and salary workers are from: U.S. Department of Labor, Bureau of Labor Statistics, *Labor Force Statistics Derived From the Current Population Survey, 1948-87*, Bulletin 2307, U.S. Govt. Print. Off., Aug. 1988, p. 383; *Handbook of Labor Statistics*, 7th ed., ed. by Eva E. Jacobs, Bernan Press, Lanham, MD, 2004, p. 75; and U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, vol. 51, Jan. 2004, p. 219. Data on nonagricultural employment are from the BLS Current Employment Statistics (CES) survey, available at [http://www.bls.gov].

Notes: The estimates of union membership for 1983-2003 are annual monthly averages based on the monthly CPS. The monthly CPS has included a question about union membership since November 1982. The estimates for 1973-1981 are from the May CPS. The data for 1930-1972 include members of AFL-CIO affiliates, unaffiliated national unions, unaffiliated unions with collective bargaining agreements with different employers in more than one state, and members of federal employee unions. Beginning in 1977, the estimates include members of employee associations. Because of changes in the CPS survey, data for 1994 and later may not be comparable to earlier years. The estimates of the number of wage and salary workers include self-employed incorporated workers. Because these workers are paid employees of a corporation, BLS treats them as wage and salary workers. Finally, the estimates of union membership and the total number of persons employed for 2000-2002 use revised sample weights based on population controls introduced in Jan. 2003 (see **Appendix B**).

Table A2. Union Membership in the United States by Gender, 1994-2003

Year	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Total Employed Labor Force
	Men			Women			
2003	9,044	73,332	12.3%	6,732	64,404	10.5%	137,736
2002	9,360	72,903	12.8%	6,822	63,582	10.7%	136,485
2001	9,546	73,196	13.0%	6,769	63,737	10.6%	136,933
2000	9,664	73,305	13.2%	6,671	63,586	10.5%	136,891
1999	9,949	71,446	13.9%	6,528	62,042	10.5%	133,488
1998	9,850	70,693	13.9%	6,362	60,771	10.5%	131,463
1997	9,763	69,685	14.0%	6,347	59,873	10.6%	129,558
1996	9,859	68,207	14.5%	6,410	58,501	11.0%	126,708
1995	9,929	67,377	14.7%	6,430	57,523	11.2%	124,900
1994	10,096	66,451	15.2%	6,644	56,611	11.7%	123,061

Source: Calculated by Congressional Research Service (CRS) from the monthly Current Population Survey (CPS).

Notes: Estimates are for persons 16 and over. Details may not add to totals because of rounding.

Table A3. Union Membership in the United States by Age, 1994-2003

Year	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Total Employed Labor Force
	16-24			25-34			35-44			
2003	966	19,340	5.0%	3,097	30,357	10.2%	4,308	34,942	12.3%	137,736
2002	996	19,668	5.1%	3,177	30,288	10.5%	4,465	35,252	12.7%	136,485
2001	1,028	20,082	5.1%	3,240	30,849	10.5%	4,711	36,057	13.1%	136,933
2000	1,009	20,405	4.9%	3,444	31,560	10.9%	4,704	36,412	12.9%	136,891
1999	1,110	20,047	5.5%	3,415	30,862	11.1%	4,918	36,743	13.4%	133,488
1998	1,014	19,595	5.2%	3,332	31,407	10.6%	5,013	36,269	13.8%	131,463
1997	968	19,033	5.1%	3,434	31,832	10.8%	4,987	35,913	13.9%	129,558
1996	991	18,619	5.3%	3,536	32,094	11.0%	5,132	35,084	14.6%	126,708
1995	1,022	18,856	5.4%	3,596	32,356	11.1%	5,254	34,240	15.3%	124,900
1994	1,125	18,931	5.9%	3,769	32,255	11.7%	5,405	33,589	16.1%	123,061
	45-54			55-64			65 and Over			
2003	4,848	31,918	15.2%	2,300	16,595	13.9%	258	4,584	5.6%	137,736
2002	5,028	31,304	16.1%	2,264	15,658	14.5%	253	4,315	5.9%	136,485
2001	5,057	31,074	16.3%	2,033	14,625	13.9%	246	4,246	5.8%	136,933
2000	4,910	30,351	16.2%	2,026	14,004	14.5%	241	4,159	5.8%	136,891
1999	4,881	28,654	17.0%	1,932	13,331	14.5%	221	3,850	5.7%	133,488
1998	4,737	27,616	17.2%	1,923	12,874	14.9%	193	3,702	5.2%	131,463
1997	4,645	26,739	17.4%	1,894	12,289	15.4%	182	3,752	4.9%	129,558
1996	4,626	25,522	18.1%	1,795	11,750	15.3%	189	3,639	5.2%	126,708
1995	4,483	24,359	18.4%	1,801	11,431	15.8%	203	3,658	5.6%	124,900
1994	4,418	23,354	18.9%	1,807	11,265	16.0%	215	3,667	5.9%	123,061

Source: Calculated by Congressional Research Service (CRS) from the monthly Current Population Survey (CPS).

Notes: Estimates are for persons 16 and over. Details may not add to totals because of rounding.

Table A4. Union Membership in the United States by Race, 1994-2003

Year	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Total Employed Labor Force
	White			Black			Other			
2003	12,535	114,233	11.0%	2,298	14,739	15.6%	943	8,764	10.8%	137,736
2002	12,988	114,048	11.4%	2,392	14,872	16.1%	802	7,565	10.6%	136,485
2001	13,170	114,489	11.5%	2,385	15,006	15.9%	760	7,439	10.2%	136,933
2000	13,111	114,422	11.5%	2,466	15,156	16.3%	757	7,313	10.4%	136,891
1999	13,349	112,275	11.9%	2,463	15,056	16.4%	665	6,157	10.8%	133,488
1998	13,118	110,936	11.8%	2,460	14,556	16.9%	633	5,972	10.6%	131,463
1997	13,088	109,847	11.9%	2,394	13,969	17.1%	627	5,742	10.9%	129,558
1996	13,232	107,801	12.3%	2,441	13,542	18.0%	596	5,364	11.1%	126,708
1995	13,149	106,491	12.3%	2,519	13,279	19.0%	691	5,130	13.5%	124,900
1994	13,515	105,195	12.8%	2,511	12,827	19.6%	714	5,039	14.2%	123,061

Source: Calculated by Congressional Research Service (CRS) from the monthly Current Population Survey (CPS).

Notes: Estimates are for persons 16 and over. Details may not add to totals because of rounding. Estimates for 2003 may not be comparable to previous years. Beginning in Jan. 2003, when answering the question about race, respondents may pick more than one race. Previously, individuals could only select one race. For 2003, this report follows BLS practice and only counts blacks and whites who select one race category.

Table A5. Union Membership in the United States by Hispanic Origin, 1994-2003

Year	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Total Employed Labor Force
	Hispanic			Non-Hispanic			
2003	1,712	17,314	9.9%	14,064	120,422	11.7%	137,736
2002	1,644	16,556	9.9%	14,539	119,929	12.1%	136,485
2001	1,692	16,183	10.5%	14,623	120,751	12.1%	136,933
2000	1,641	15,744	10.4%	14,693	121,147	12.1%	136,891
1999	1,525	13,719	11.1%	14,951	119,769	12.5%	133,488
1998	1,471	13,236	11.1%	14,741	118,228	12.5%	131,463
1997	1,407	12,724	11.1%	14,703	116,834	12.6%	129,558
1996	1,394	11,622	12.0%	14,875	115,085	12.9%	126,708
1995	1,357	11,135	12.2%	15,003	113,765	13.2%	124,900
1994	1,420	10,777	13.2%	15,321	112,284	13.6%	123,061

Source: Calculated by Congressional Research Service (CRS) from the monthly Current Population Survey (CPS).

Notes: Estimates are for persons 16 and over. Details may not add to totals because of rounding. Estimates for 2003 may not be comparable to previous years. Beginning in Jan. 2003, the CPS question on Hispanic origin was reworded to ask respondents directly whether they are Hispanic. Previously, individuals were identified as Hispanic based on their, or their ancestors', country of origin. Hispanics may be of any race.

Table A6. Union Membership in the United States by Educational Attainment, 1994-2003

Year	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Total Employed Labor Force
	Less than a High School Education			High School Graduate			1-3 Years of College			
2003	1,096	16,499	6.6%	5,008	41,417	12.1%	4,606	39,529	11.7%	137,736
2002	1,174	16,552	7.1%	5,330	41,543	12.8%	4,641	39,177	11.8%	136,485
2001	1,237	17,020	7.3%	5,404	42,018	12.9%	4,855	39,603	12.3%	136,933
2000	1,324	17,450	7.6%	5,534	42,580	13.0%	4,710	39,193	12.0%	136,891
1999	1,323	16,829	7.9%	5,621	41,999	13.4%	4,734	38,179	12.4%	133,488
1998	1,378	17,097	8.1%	5,612	41,718	13.5%	4,696	37,333	12.6%	131,463
1997	1,377	16,773	8.2%	5,762	41,812	13.8%	4,534	36,831	12.3%	129,558
1996	1,503	16,257	9.2%	5,845	40,772	14.3%	4,626	36,615	12.6%	126,708
1995	1,497	15,868	9.4%	5,950	40,489	14.7%	4,692	36,608	12.8%	124,900
1994	1,550	15,807	9.8%	6,245	40,712	15.3%	4,709	35,530	13.3%	123,061
	Bachelor's Degree			Advanced Degree						
2003	2,994	26,859	11.1%	2,071	13,431	15.4%				137,736
2002	2,954	26,245	11.3%	2,084	12,968	16.1%				136,485
2001	2,837	25,603	11.1%	1,982	12,690	15.6%				136,933
2000	2,815	25,302	11.1%	1,950	12,366	15.8%				136,891
1999	2,841	24,494	11.6%	1,958	11,986	16.3%				133,488
1998	2,686	23,714	11.3%	1,839	11,601	15.9%				131,463
1997	2,653	23,082	11.5%	1,784	11,060	16.1%				129,558
1996	2,547	22,297	11.4%	1,748	10,767	16.2%				126,708
1995	2,469	21,362	11.6%	1,752	10,574	16.6%				124,900
1994	2,515	20,879	12.0%	1,721	10,134	17.0%				123,061

Source: Calculated by Congressional Research Service (CRS) from the monthly Current Population Survey (CPS).

Notes: Estimates are for persons 16 and over. Details may not add to totals because of rounding.

Table A7. Union Membership in the United States in the Private and Public Sectors, 1994-2003

Year	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Total Employed Labor Force
	Public			Private			
2003	7,324	19,710	37.2%	8,452	118,026	7.2%	137,736
2002	7,387	19,589	37.7%	8,795	116,896	7.5%	136,485
2001	7,095	19,308	36.7%	9,192	117,625	7.8%	136,933
2000	7,059	19,157	36.9%	9,254	117,734	7.9%	136,891
1999	7,058	18,938	37.3%	9,419	114,550	8.2%	133,488
1998	6,905	18,401	37.5%	9,306	113,062	8.2%	131,463
1997	6,747	18,147	37.2%	9,363	111,411	8.4%	129,558
1996	6,854	18,210	37.6%	9,415	108,497	8.7%	126,708
1995	6,927	18,358	37.7%	9,432	106,542	8.9%	124,900
1994	7,091	18,339	38.7%	9,649	104,722	9.2%	123,061

Source: Calculated by Congressional Research Service (CRS) from the monthly Current Population Survey (CPS).

Notes: Estimates are for persons 16 and over. Details may not add to totals because of rounding.

Table A8. Union Membership in the United States by Level of Government, 1994-2003

Year	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members, Public Sector	Total Employed Labor Force, Public Sector
	Federal Government			State Government			Local Government				
2003	1,004	3,247	30.9%	1,706	5,636	30.3%	4,614	10,827	42.6%	7,324	19,710
2002	1,070	3,297	32.5%	1,769	5,706	31.0%	4,547	10,585	43.0%	7,387	19,589
2001	1,033	3,317	31.2%	1,726	5,713	30.2%	4,336	10,278	42.2%	7,095	19,308
2000	1,027	3,275	31.4%	1,624	5,515	29.4%	4,409	10,367	42.5%	7,059	19,157
1999	1,047	3,264	32.1%	1,527	5,233	29.2%	4,484	10,440	42.9%	7,058	18,938
1998	1,105	3,269	33.8%	1,431	5,150	27.8%	4,370	9,982	43.8%	6,905	18,401
1997	1,030	3,217	32.0%	1,485	5,031	29.5%	4,232	9,899	42.7%	6,747	18,147
1996	1,040	3,284	31.7%	1,566	5,132	30.5%	4,249	9,795	43.4%	6,854	18,210
1995	1,117	3,447	32.4%	1,531	5,171	29.6%	4,280	9,739	43.9%	6,927	18,358
1994	1,181	3,518	33.6%	1,596	5,174	30.8%	4,314	9,647	44.7%	7,091	18,339

Source: Calculated by Congressional Research Service (CRS) from the monthly Current Population Survey (CPS).

Notes: Estimates are for persons 16 and over. Details may not add to totals because of rounding.

Table A9. Union Membership in the United States by Industry, 1994-2002

Year	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Total Employed Labor Force
	Farming, Forestry, And Fisheries			Mining			Construction			Manufacturing			Transportation, Communications and Utilities			
2002	55	3,458	1.6%	39	491	8.0%	1,367	9,538	14.3%	2,510	18,100	13.9%	2,675	9,769	27.4%	136,485
2001	50	3,332	1.5%	63	565	11.1%	1,388	9,695	14.3%	2,717	19,295	14.1%	2,692	9,778	27.5%	136,933
2000	59	3,554	1.7%	56	527	10.6%	1,390	9,505	14.6%	2,881	20,271	14.2%	2,749	9,882	27.8%	136,891
1999	56	3,393	1.7%	58	557	10.5%	1,362	8,872	15.4%	3,037	20,186	15.0%	2,795	9,591	29.1%	133,488
1998	36	3,446	1.0%	73	624	11.7%	1,212	8,549	14.2%	3,137	20,597	15.2%	2,795	9,380	29.8%	131,463
1997	43	3,527	1.2%	84	637	13.2%	1,223	8,296	14.7%	3,270	20,795	15.7%	2,736	9,170	29.8%	129,558
1996	37	3,567	1.0%	76	568	13.4%	1,158	7,924	14.6%	3,412	20,504	16.6%	2,692	8,792	30.6%	126,708
1995	45	3,562	1.3%	84	649	12.9%	1,072	7,632	14.0%	3,469	20,505	16.9%	2,770	8,725	31.8%	124,900
1994	49	3,552	1.4%	102	681	15.0%	1,110	7,475	14.8%	3,533	20,170	17.5%	2,847	8,690	32.8%	123,061
	Retail and Wholesale Trade			Finance, Insurance, and Real Estate			Private Household and Other Services			Professional Services			Public Administration			
2002	1,158	28,151	4.1%	183	9,093	2.0%	599	16,836	3.6%	5,588	34,832	16.0%	2,010	6,217	32.3%	136,485
2001	1,232	28,112	4.4%	199	8,912	2.2%	692	17,249	4.0%	5,331	33,860	15.7%	1,950	6,134	31.8%	136,933
2000	1,261	28,278	4.5%	179	8,850	2.0%	665	16,961	3.9%	5,198	33,022	15.7%	1,898	6,039	31.4%	136,891
1999	1,291	27,591	4.7%	201	8,770	2.3%	638	16,177	3.9%	5,179	32,384	16.0%	1,860	5,966	31.2%	133,488
1998	1,295	27,192	4.8%	205	8,568	2.4%	578	15,716	3.7%	4,920	31,492	15.6%	1,960	5,899	33.2%	131,463
1997	1,329	26,759	5.0%	216	8,288	2.6%	524	15,418	3.4%	4,856	30,945	15.7%	1,827	5,724	31.9%	129,558
1996	1,343	26,636	5.0%	230	8,110	2.8%	589	14,755	4.0%	4,871	30,062	16.2%	1,861	5,790	32.1%	126,708
1995	1,410	26,130	5.4%	195	7,975	2.4%	571	14,060	4.1%	4,834	29,683	16.3%	1,909	5,978	31.9%	124,900
1994	1,392	25,618	5.4%	217	8,114	2.7%	613	13,854	4.4%	4,914	29,037	16.9%	1,963	5,870	33.4%	123,061

Source: Calculated by Congressional Research Service (CRS) from the monthly Current Population Survey (CPS).

Notes: Estimates are for persons 16 and over. Details may not add to totals because of rounding.

Table A10. Union Membership in the United States by Occupation, 1994-2002

Year	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Total Employed Labor Force
	Managerial and Professional			Technical, Sales, and Administrative			Service			
2002	4,812	42,546	11.3%	3,204	38,945	8.2%	2,264	19,250	11.8%	136,485
2001	4,658	42,162	11.0%	3,208	39,573	8.1%	2,277	18,752	12.1%	136,933
2000	4,566	41,223	11.1%	3,122	39,891	7.8%	2,242	18,513	12.1%	136,891
1999	4,594	40,351	11.4%	3,191	38,851	8.2%	2,151	18,089	11.9%	133,488
1998	4,252	38,845	10.9%	3,239	38,754	8.4%	2,209	17,895	12.3%	131,463
1997	4,208	37,738	11.2%	3,158	38,342	8.2%	2,141	17,491	12.2%	129,558
1996	4,196	36,437	11.5%	3,231	37,735	8.6%	2,103	17,227	12.2%	126,708
1995	4,116	35,187	11.7%	3,364	37,530	9.0%	2,112	16,947	12.5%	124,900
1994	4,102	33,772	12.1%	3,465	37,334	9.3%	2,222	16,909	13.1%	123,061
	Precision Production, Craft, and Repair			Operators, Fabricators, and Laborers			Farming, Forestry, and Fishing			
2002	2,570	14,587	17.6%	3,243	17,674	18.3%	89	3,484	2.6%	136,485
2001	2,730	15,139	18.0%	3,346	17,985	18.6%	96	3,321	2.9%	136,933
2000	2,800	15,107	18.5%	3,509	18,683	18.8%	95	3,474	2.7%	136,891
1999	2,800	14,540	19.3%	3,627	18,265	19.9%	113	3,392	3.3%	133,488
1998	2,708	14,364	18.9%	3,713	18,173	20.4%	90	3,432	2.6%	131,463
1997	2,723	14,112	19.3%	3,791	18,393	20.6%	88	3,483	2.5%	129,558
1996	2,648	13,578	19.5%	4,000	18,182	22.0%	92	3,548	2.6%	126,708
1995	2,692	13,504	19.9%	3,983	18,106	22.0%	91	3,626	2.5%	124,900
1994	2,716	13,478	20.2%	4,132	17,946	23.0%	103	3,623	2.8%	123,061

Source: Calculated by Congressional Research Service (CRS) from the monthly Current Population Survey (CPS).

Notes: Estimates are for persons 16 and over. Details may not add to totals because of rounding.

Table A11. Union Membership in the United States by Region, 1994-2003

Year	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1000s)	Employed Labor Force (1,000s)	Percent Union Members	Union Members (1,000s)	Employed Labor Force (1,000s)	Percent Union Members	Total Employed Labor Force
	East South Central			Pacific			Mountain			West South Central			New England			
2003	556	7,863	7.1%	3,326	21,786	15.3%	621	9,210	6.7%	763	14,955	5.1%	884	7,162	12.3%	137,736
2002	619	7,720	8.0%	3,338	21,187	15.8%	646	9,045	7.1%	782	14,557	5.4%	931	7,261	12.8%	136,485
2001	619	7,738	8.0%	3,137	21,441	14.6%	702	9,021	7.8%	839	14,646	5.7%	910	7,206	12.6%	136,933
2000	676	7,921	8.5%	3,070	21,535	14.3%	729	8,944	8.2%	820	14,654	5.6%	921	7,172	12.8%	136,891
1999	641	7,825	8.2%	3,203	21,193	15.1%	727	8,530	8.5%	867	14,589	5.9%	977	6,917	14.1%	133,488
1998	644	7,811	8.2%	3,105	20,705	15.0%	664	8,314	8.0%	815	14,312	5.7%	950	6,875	13.8%	131,463
1997	628	7,632	8.2%	2,994	20,192	14.8%	692	8,140	8.5%	826	13,978	5.9%	901	6,802	13.3%	129,558
1996	681	7,539	9.0%	2,938	19,570	15.0%	660	7,790	8.5%	871	13,703	6.4%	895	6,661	13.4%	126,708
1995	706	7,453	9.5%	3,092	19,230	16.1%	694	7,645	9.1%	823	13,472	6.1%	963	6,585	14.6%	124,900
1994	739	7,334	10.1%	3,130	19,066	16.4%	684	7,349	9.3%	852	13,131	6.5%	926	6,532	14.2%	123,061
	South Atlantic			East North Central			West North Central			Middle Atlantic						
2003	1,572	25,465	6.2%	3,478	22,222	15.7%	1,107	10,273	10.8%	3,467	18,801	18.4%				137,736
2002	1,515	24,954	6.1%	3,618	22,445	16.1%	1,137	10,305	11.0%	3,596	19,011	18.9%				136,485
2001	1,602	25,083	6.4%	3,682	22,745	16.2%	1,169	10,257	11.4%	3,656	18,796	19.4%				136,933
2000	1,627	25,165	6.5%	3,715	22,733	16.3%	1,158	10,074	11.5%	3,618	18,692	19.4%				136,891
1999	1,588	24,134	6.6%	3,729	22,327	16.7%	1,211	9,900	12.2%	3,533	18,074	19.5%				133,488
1998	1,582	23,664	6.7%	3,791	21,937	17.3%	1,140	9,891	11.5%	3,520	17,954	19.6%				131,463
1997	1,545	23,294	6.6%	3,738	21,800	17.1%	1,168	9,761	12.0%	3,617	17,960	20.1%				129,558
1996	1,607	22,786	7.1%	3,824	21,504	17.8%	1,197	9,657	12.4%	3,596	17,498	20.6%				126,708
1995	1,543	22,465	6.9%	3,746	21,307	17.6%	1,149	9,473	12.1%	3,644	17,269	21.1%				124,900
1994	1,694	22,103	7.7%	3,789	20,967	18.1%	1,135	9,269	12.2%	3,792	17,310	21.9%				123,061

Source: Calculated by Congressional Research Service (CRS) from the monthly Current Population Survey (CPS).

Notes: Estimates are for persons 16 and over. See **Appendix A** for a list of states by region. Details may not add to totals because of rounding.

Appendix B: Data and Methodology

The analysis in this report uses data from the monthly Current Population Survey (CPS). The CPS is a household survey conducted by the U.S. Bureau of the Census for the Bureau of Labor Statistics (BLS) of the U.S. Department of Labor. The monthly CPS is the main source of labor force data for the nation, including estimates of the monthly unemployment rate. The CPS collects a wide range of demographic, social, and labor market information. Each month, approximately 50,000 households are contacted to be interviewed, either in person or by phone. The CPS collects labor force data for civilians 15 and over. The official definition of the civilian labor force is ages 16 and over. The monthly CPS sample is representative of the civilian noninstitutional population; it does not include persons on active military duty.[58,59]

Each month, one-fourth of the CPS sample — called the Outgoing Rotation Group, or ORG — is asked questions about union membership and current hourly or weekly earnings. The monthly CPS has included questions on union membership and union coverage since November 1982.[60] For the tables in *Appendix A*, the ORG samples for each month from 1994 to 2003 were combined to calculate a monthly average for the year.[61]

The analysis in this report examines employed persons ages 16 and over. Employed persons include both wage and salary workers and self-employed persons. Data on union membership and coverage exclude self-employed persons. Data are for the sole or main job of full-time and part-time workers.

Several changes were made in the January 2003 CPS. In answering the question about race, respondents may now pick more than one race. Previously, individuals could only select one race. For 2003, this report follows BLS practice and only counts blacks and whites who selected one race category. Also, beginning in 2003, the CPS question on Hispanic origin was reworded to ask respondents directly whether they are Hispanic. Previously, individuals were identified as Hispanic based on their, or their ancestors', country of origin. Hispanics may be of any race. As a result of these changes, data for 2003 on race and Hispanic ethnicity are not directly comparable to data for earlier years.

---

[58] U.S. Bureau of the Census, *Measuring 50 Years of Economic Change*, Current Population Reports, P60-203, Sept. 1998, p. D-1.

[59] U.S. Department of Labor, Bureau of Labor Statistics, *Basic Monthly Survey*, available at [http://www.bls.census.gov/cps/bglosary.htm].

[60] U.S. Department of Labor, Bureau of Labor Statistics, *Current Population Survey: Design and Methodology*, Technical Paper 63, Mar. 2000, pp. 2-4.

[61] Households are in the CPS survey for four consecutive months, out of the survey for eight months, and back in the survey for four more months. The questions about earnings (and union status and hours worked) are asked of households leaving the survey (either permanently or for eight months). During a 12-month period, the observations on earnings are for unique individuals.

In addition, in January 2003, the CPS introduced population controls based on the 2000 Census. Sample weights for January 2000 through December 2002 were revised to reflect the higher population estimates from the 2000 census and the higher rate of population growth since the census. This report uses the revised sample weights for 2000-2002. The revised weights increase the size of the labor force but have less of an effect on percentage calculations.

Finally, in 2003, new classification systems were introduced for industry and occupation. Because of these new systems, data on industry and occupation for 2003 are not comparable to data for earlier years, and are not included in this report.[62]

The regional data in **Figure 11** and **Table A11** are based on state groupings used by the Census Bureau. The Census Bureau divides the United States into four regions and nine divisions. The nine divisions are as follows:

- *East North Central*: Wisconsin, Indiana, Ohio, Michigan, and Illinois;
- *East South Central*: Tennessee, Kentucky, Alabama, and Mississippi;
- *Middle Atlantic*: Pennsylvania, New York, and New Jersey;
- *Mountain*: Colorado, Arizona, Idaho, Montana, Utah, Nevada, Wyoming, and New Mexico;
- *New England*: Massachusetts, Maine, Vermont, New Hampshire, Connecticut, and Rhode Island;
- *Pacific*: Alaska, Washington, Hawaii, Oregon, and California;
- *South Atlantic*: Maryland, Delaware, Georgia, District of Columbia, Florida, North Carolina, Virginia, South Carolina, and West Virginia;
- *West North Central*: Minnesota, Kansas, South Dakota, Missouri, North Dakota, Nebraska, and Iowa; and
- *West South Central*: Texas, Louisiana, Oklahoma, and Arkansas.

Confidence Levels

The comparisons discussed in the text of this report are statistically significant at the 95% confidence level. Estimates based on survey responses from a sample of households have two kinds of error: nonsampling error and sampling error. Examples of nonsampling error include information that is misreported and errors made in processing collected information. Sampling error occurs because a sample, and not the entire population, of households is surveyed. The difference between an estimate based on a sample of households and the actual population value is known as sampling error.[63] When using sample data, researchers typically construct confidence intervals around population estimates. Confidence intervals provide

---

[62] Mary Bowler, Randy E. I.G., Stephen Miller, Ed Robison, and Anne Polivka, Revisions to the Current Population Survey Effective in Jan., 2003, *Employment and Earnings*, Feb. 2003, vol. 51, pp. 4-5, 7.

[63] U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, vol. 49, Nov. 2002, pp. 147-148.

information about the accuracy of estimated values. With a 95% confidence interval and repeated samples from a population, 95% of intervals will generally include the actual value of a population characteristic.